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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/520,119	01/03/2005	Kei Ishii	0946-0125PUS1	9687
2292 7590 10/01/2007 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			EXAMINER MAI, NGOCLAN THI	
			ART UNIT 1742	PAPER NUMBER
			NOTIFICATION DATE 10/01/2007	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/520,119	ISHII ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Ngoclan T. Mai	1742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 06 July 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. Amendment filed 7/6/07 has been entered. Claim 6 has been amended with no substantive matter added to the claim.

### ***Claim Rejections - 35 USC § 103***

2. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oliver et al. (U.S. Patent No. 5,767,426) in view of Uenosono (US 2002/0029657) and Horie et al. (U.S. Patent No. 4,543,208). The rejection was made in previous office action, paragraph number 2 and is incorporated herein by reference. It is noted that the heading of paragraph number 2 in previous office action indicated 1, 4, 5, and 6 are rejected, however one reading the body of the rejection would know that the rejection also includes claims 2 and 3, see page 4, first full paragraph and the status of the claims in PTOL-326. Therefore the indication of claims 1-6 as being rejected is not a modified rejection but merely to fix the typo error.

### ***Response to Arguments***

3. Applicant's arguments, see page 7, filed July 6, with respect to claim 1 as being unpatentable over Horie in view of Uenosono have been fully considered and are persuasive. However the rejection of claim 1-6 as being unpatentable over Oliver in view of Uenosono and Horie is maintained.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is

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some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Oliver teaches “The iron-based particles that are useful in the invention are any of pure iron or iron-containing (including steel or ferromagnetic) particles generally used in powder metallurgy methods”, col. 4, lines 24-27. Oliver continues to teach “[T]he preferred iron-based particles for use in the invention are highly compressible powders of substantially pure iron”, col. 4, lines 41-42 and further teaches “[O]ther good ferromagnetic materials are blends of ferrophosphorus powders such as iron-phosphorous alloys or iron phosphide compounds in powdered form, admixed with particles of substantially pure iron, col. 4, lines 60-62.

Uenosono teaches powder metallurgy method employing iron-base mixed powder comprising atomized powder and reduced iron powder. Uenosono teaches by employing appropriate amount of atomized iron powder from 60 to 90% and reduced iron powder from about 10-47%, the die filling property of the iron-based mixed powder is improved without lowering the compressibility of the powder.

The examiner submits that it would have been obvious to one skilled in the art to employ the iron-base mixed powder of Uenosono as the iron-based powder in the process of Oliver with the expectation that the iron-base mixed powder when being filled into the die would not only have improvement in die filling property but also have high compressibility as taught by Uenosono.

As for the argument that there is no motivation to combine Oliver with Uenosono because unlike Oliver and applicants, Uenosono teaches combining the iron powder

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metallurgical employing sintering to bind the metal powder and not by the binder resin as in the instant application and Oliver. This is not persuasive because the examiner relies on Uenosono for teaching of the iron base mixed powder mixture and not for its sintering step.

As for the argument that Horie's reference cannot properly be used to suggest the employment of polyimide binder in the context of the present invention because Horie relates to magnetic cores made by compression-molding of powder materials, which is quite different technology from the powder metallurgical product technology of the present invention. This is not persuasive because Horie which teaches in the same field of endeavor discloses insulating binder resin can be thermosetting and thermoplastic resin such as epoxy resins, polyamide resin, polyimide resin, polyester resins, polycarbonate resins, polyacetal resins, polysulfone resins, polyphenylene oxide resins and the like, col. 3, l. 51-65. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the polymeric compound taught by Horie for that of the Oliver for the purpose of providing an insulator and binder to iron-based powder of Oliver in view of Uenosono. To select thermosetting or thermoplastic polyimide among the well known insulating binder resin taught by Horie for the polymeric material of Oliver is within one skill in the art and would have been obvious.

For the above reasons claims 1-6 are maintained rejected under 35 U.S.C. 103(a) as being unpatentable over Oliver et al (U.S. Patent No. 5,767,426) in view of Uenosono (US 2002/0029657) and Horie et al. (U.S. Patent No. 4,543,208).

***Conclusion***

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ngoclan T. Mai whose telephone number is (571) 272-1246. The examiner can normally be reached on 9:30-6:00 PM Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

n.m.

  
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